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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/533,578	LOVISA ET AL.	
	Examiner	Art Unit	
	TUAN A. VU	2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *2/03/06*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-34,37-43,46-48,51-59 and 62-65* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-34,37-43,46-48,51-59 and 62-65* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *5/03/05* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *5/03/05;4/9/07;12/08/09*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to the application filed 2/03/2005.

Claims 1-34, 37-43, 46-48, 51-59, 62-65 have been submitted for examination.

Specification: Abstract

2. The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). The "abstract" published in a associated international filing being referenced as a basis for the CFR 371 National stage of the current application is deemed not sufficient a compliance towards meeting the above CFR. A new abstract of the disclosure is required and must be presented on a separate sheet, Rigolert from any other text.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 14, 10, 51-52, 38 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 11, 17, 6, 20 of copending Application No. 10,533, 577 (hereinafter '577).

Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following observations. Following are but a few examples as to how

the certain claims from the instant invention and from the above copending application are conflicting with each other.

As per instant claim 14, '577 claim 11 recites user to obtain a desired service using a processing system including determining a combination of selected components from the user, each component associated with a service and provided by different entities, implementing the component by a service request to each entity to request the service to be performed. Hence '577 has recited a obvious language variant of instant claim 1 reciting of implementing a component for code generating, component combinations with requirements to allow desired functionality to be achieved, component servers, each to correspond to said component in the combination, component server to perform the service. Further '577 claim 11 recites 'combination … in accordance with input received from the user … combination defining a sequence of service portions and interconnections between components defining transfer of data' ('577 claim 1), hence this would be a obvious variant of instant claim 9 implemented by one or more processing systems. Further, '577 claim 11 recites end/base station to generate a graphical representation of the selected components, manipulate the representation in response to user commands, transfer the graphical representation to the end station, which is considered a same variant of the 'graphical representation' recited in instant claim 14.

But '577 does not explicitly recite each server to perform data manipulation service in accordance with defined series, servers performing service by interacting with data sequence, including interacting among servers and causing further implementation with obtaining of results from the series of data manipulation, the resultant data sequence being the computer code, providing the computer code to a processing system, causing this to perform the desired functionality.

However, '577 claim 11 recites base station *manipulating* the graphical representation in response to the received user commands, transferring the representation to the end station, to implement the combined components in accordance to the graphical representation and (in '577 claim 1) different components provided by different entities … input received from the user … combination defining a sequence of service portions and interconnections between components defining transfer of data". In view of '577 recited of 'service request … transferred to each entity … respective to a portion … causing the desired service to be performed' ('577 claim 1) it is recognized that '577 has disclosed a obvious variant of: manipulation service being a request portion to be performed via receiving first system user's request, of interacting among entities via transfer of portion to be performed, so that the combined resultant from each separate 'manipulation' service portion by each said entity or base station results in the target component which when transmitted to the first end station would achieve the implementation of the user desired functionality (i.e. code implementation to execute that functionality). That is, based on the *interconnections define in the defined sequence and the transfer between entities* based thereon, '577 claim 11 has disclosed a obvious variant of 'manipulation service' being distributed among entities or servers so to include interaction among these entities, including transfer and obtaining of resulting data from each portion being performed by each "respective" serving entity.

As per instant claim 10, '577 claim 17 discloses receiving information to be manipulated at ports, performing manipulation and providing the manipulated information at ports; hence has disclosed an obvious variant of 'manipulation service' performed by an server entity in response to user definition of component combination or user inputs and indication of

ports of each said component including interconnect ones of the ports in response to the user commands in view of the user's role as set forth above (see '577 claim 1).

As per instant claim 51, this claim includes the same language as instant claim 1, hence in view of the teaching of '577 claim 11 with manipulation of data by the server receiving user commands, user's defined interconnected components to describe the sequence of 'service portions' to be performed by different entities and transfer between entities, '577 claim 11 would represent a obvious language representing instant claim 51.

As per instant claim 52, '577 claim 6 recites base station storing of port specifications and providing port information to the end station for user to select, hence has disclosed a obvious variant of instant claim 52.

As per instant claim 38, '577 claim 20 also recites 'providing performance information to the user for user's selection, including *entity, geographical location, duration, cost associated with implementing, rating*, but does not recite 'details' by one or more processing systems coupled to end stations, said systems to provide details to users, details of components or based on component specifications from each entity that perform respective manipulation service. Based on the provision of information and a cost corresponding to implementation by each such entity, the concept of storing details by a server entity is evident, as in '577 claim 20. Based on the transfer between entities to achieve the overall functionality effected as portion of service each performed by a respective entity, the overall functionality implemented from sequence of components defined by the user to request inter-cooperation among providers in '577 claim 1, it would have been obvious for one skill in the art at the time the invention was made to implement the plurality of entities in '577 so that information stored therein are details regarding the

component specification and the service of manipulation data to achieve the 'desired functionality' of a end users based on criteria to associate the sequence of components and the various 'performance information' behind the stored details.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 29-34, 64-65, 48, 59 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The current focus of the Patent Office in regard to statutory inventions under 35 U.S.C. § 101 for method claims and claims that recite a judicial exception (software) is that the claimed invention recite a practical application. The following link on the World Wide Web is the United States Patent And Trademark Office (USPTO) reference in terms of guidelines on a proper analysis on 35 U.S.C. §101 rejection.
<http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf>

Specifically, **claims 29** recites 'apparatus" having processing systems for determining, implementing code, causing server implementation, server to perform a service by interacting and obtaining resultant sequence as code, and providing code for execution at the processing system. As based from the Disclosure, all of these acts are implemented by software or client/server processes, none of which explicitly equated to a machine. The 'apparatus' claim as a whole amounts to mere listing of software-implemented acts. In all, the 'system' or 'apparatus' amounts to listing of software functionality and this fall into the "Functional Descriptive

Material' deficiency as set forth in Annex IV (pg. 52-54) of the above 101 Guidelines; thus, the claim listing of mere software functionalities without explicit inclusion of hardware or tangible storage support cannot constitute a statutory category of subject matter. The 'apparatus' claim 29 is rejected as non-statutory, and dependent claims 30-34, 64-65 are also rejected for not curing to the lack of hardware support deficiency required for the subject matter claimed to belong to a permissible category of subject matter, thereby constituting a non-statutory subject matter.

As per claim 48, the 'apparatus' as recited amounts to software-implemented act of determining, selecting, defining, and generating of specification; hence exhibits the same lack of hardware support as set forth above. The 'apparatus' claim 48 is rejected as non-statutory for lack of hardware support required in order for the subject matter claimed to belong to a permissible category of subject matter, thereby constituting a non-statutory subject matter.

As per claim 59, this 'apparatus' claim recites software-implemented act of providing, allowing, causing, interacting, obtaining, and as set forth above, the claim lacks hardware support to remedy to the 'functional descriptive material' (mere listing of software functionalities per se) deficiency as mentioned above. The claim is rejected (as non-statutory) for not enable one to categorize the claim as any statutory subject matter.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 23-24, 40-41, 46-47 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As per claims 23-24, 40-41, specifically, the "generating of revenue" and the 'providing … some of the revenue' to 'an entity' along with "having the operator … retain some of the revenue" (re claim 23-34), or 'providing a portion of fee to … entity" (re claim 41) appears a human-driven type of transaction or acts. The invention is completely devoid of a mechanism that implements (without human directly performing it) the above revenue generating, charging and repartitioning. This language cannot be part of the invention since it relies of monetary transaction and human intervention, as one cannot make or implement the above limitations from lack of teachings from the Disclosure. These limitations will be given no patentable weight and treated broadly as mere intended use.

As per claim 46, the 'determining a process of selecting one of the methods … received data' is nowhere disclosed without sufficient details to reasonably convey such "process" determining concept, based on the data received. According to the specifications, *methods, data, component combination, service* are determined; but nowhere is there a paragraph describing how a "process of selecting" methods is being determined by (emphasis added) any entity. One would be incapable of make or use the invention because of the lack of teaching and complete absence of a programmatic process of "determining" based on *received data* as claimed, the 'received data' having no structural relationship to any steps a) b) b-i) b-ii) of the claim. That is,

the claim does not make it clear as to what action actually leads to 'received data' for this to reasonably convey a relationship to 'selecting one of the methods', or under what antecedent basis (emphasis added) in the claim taken as a whole, any reception of data has been achieved. Nowhere in the disclosure is there teaching that relates "reception of data" with 'determining a process of selecting' as so recited for undue experimentation would have to be used for one to implement the 'determining a process' as claimed. The 'determining a process of selecting … methods' will be treated as selecting a method in a broad sense; i.e. this is partially subsumed into the step recited as 'determining at least two methods of performing the service'. Claim 46 for failing to provide enabling support for the above lack of description will also be rejected as not fulfilling the requirement of a proper description.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 1-19, 25-27, 29-34, 46-48, 51-54, 56-59, 62-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rigole, USPN: 7,139,728 (herein Rigole) in view of Lipkin, USPN: 6,721,747(herein Lipkin) and further in view of Gangopadhyay et al, USPN: 6,973,638 (herein Gangopadh).

As per claim 1, Rigole discloses a method of generating code using components, each component embodying a respective data manipulation service, the method including:

a) Determining a component combination, the component combination being defined in accordance with requirements (col. 7 line 50 to col. 8 line 9 - Note: participating computer as consumer having UI and form filling to file a request - col. 5 lines 48-58 - to obtain fulfillment of portion of a collective/logical chains/threads implemented by contributing provider's actions - col. 6 line 60 to col. 7 line 2 -- reads on combination of component – see *one or more modules 2.03* - col. 10 lines 6-18) to allow a desired functionality to be achieved; and,

b) Implementing the component combination and data manipulation by:

i) Causing the implementation of a component server corresponding to each component in the combination defining a series of data manipulations (e.g. col. 4 lines 44 to col. 5 line 17 – Note: consumer request based on implicating of a defined number of participating providers/parties – *service sector* - leading to communication of data – capture and processing, transmit - among the participating parties **reads on** a series of data manipulations – see col. 10 lines 39-48), each component server being implemented by a processing system (e.g. *executed as a separate logical server ... physical device* - col. 6 line 60 to col. 7 line 2; col. 10 line 39-53); and,

ii) Causing each component server to perform the respective data manipulation service according to the defined series of data manipulations (col. 6 lines 36-46; service Selection – col. 11; Bill module – col. 11-12, monitoring module – col. 12-13, best services module – col. 13, search module col.14, incentive module col. 14, Mining module, col. 14), at least some of the component servers performing the respective service by interacting with a data sequence (e.g. col. 5 lines 6-17; *data capture ... source ... another participating party's computer … presenting data to other computer* - col. 5 line 64 to col. 6 line 18), and

at least some of the component servers performing service by at least one of:

(1) interacting with one or more component servers (e.g. col. 5 line 64 to col. 6 line 18; col. 5 lines 6-17; col. 6 lines 49-51); and,

(2) causing the implementation of further components (Note: participating parties based on one single entry, in IPCS collaboration scheme using transfer of data among parties reads on further components – see *logical chain* - col. 6 line 60 to col. 7 line 2; single entry – col. 2 lines 58-64); and,

iii) obtaining, as a result of performing the series of data manipulations and from the data sequence, a resultant data sequence, the resultant data sequence (col. 10 lines 49-67; col. 15 lines 66 to col. 16 line 21).

Rigole does not explicitly disclose implementing the component combination and data manipulation to *generate the computer code* by implementing server and causing server to perform a service; nor does Rigole explicitly disclose *obtaining*, as result from data manipulations data sequence, *a resultant data sequence being the computer code and providing the computer code to a processing system, such that execution of the computer code by the processing system causes the processing system to perform the desired functionality.*

Consumers product being deliverables a market products or services or software assets was a well-known concept at the time Rigole describes a collaboration among participating parties to fulfill the consumer request for one of the variety of business or online products (see Rigole: BACKGROUND: col. 1-2) where business applications are remotely stored as user's programs (Users programs 2.03 – Fig. 2; col. 15 lines 47-52) within any participating computer (consumer or provider) such that, for a user environment, code is necessary in the user's

operating on format being provided -- i.e. standardized languages (*Java script, applet, HTML* - col. 8 lines 64 to col. 9 line 4) or in the user's context of dynamic script creating (*appropriate code from such languages... dynamically created ... appropriate scripts* – col. 7 lines 50-64). **Lipkin** discloses business architecture with core services including offerings/catalog and metadata-based managing tools (Fig. 7; col. 9 lines 47-67), providing XML-based interfaces (col. 23 lines 15-65; col. 87-88) for the *business object author* to implement business applications (Fig. 4, 8a; col. 24), via development of message interconnect, management and finding/learning (col. 5-8; Fig. 10) to generate APIs for query, delivery and integration (Fig. 14-16), via reuse of bean API (col. 23-30; col. 33-34) from model diagrams (Fig. 8B-8C), code being embedded in transmission script format in XML; e.g. to effectuate a context of a shopping cart(see col. 92-99; col. 28 line 49 to col. 29 line 19).

Combining the interaction among graphical model to support business related XML format transmission embedded with underlying bean code, code reuse via predefined Apis or modules (with Java/bean) as in Lipkin, and reliance upon collaborating parties as in Rigole with transmission of format for use with scripts operating in language as *bean, javascript* as above, **Gangopadh**, in a collaboration architectural approach implicating multiple parties or applications (col. 4 lines 46 to col. 5 lines 8) discloses generation of code based on events representing at a user interface requiring asynchronous contribution of applications (Gangopadh: Fig. 1A, 1B) to model or define a business process (Gangopadh: col. 3 lines 42-45) via activity diagrams representation depicting interaction between the hierarchy of nodes (Gangopadh: Fig. 18) having connectors to other nodes, and where messages/arcs between business object nodes represents a service request (Gangopadh: col. 10 lines 46-67) and where each request (or

message arc; Gangopadh: Fig. 11, 14-15) include implementation of a service port (Gangopadh: col. 16 lines 17-25). Based on software being delivery as part of XML/metadata based service as in Lipkin's and Rigole's provider *matching programs* to fulfill a user requests as set forth above, it would have been obvious for one skill in the art at the time the invention was made to implement the collaboration of servers or parties in Rigole, so that the resultant of data sequence or series of manipulation thereof (performed by the service sectors or collaborating parties) needed to implement the user request, would be resultant as to form a implemented (business application as in Lipkin) code which when delivered to the users in the user endeavor's to develop a business application (as in Gangopadh multi-node services message with port definition, or Rigole's use of inter-communicating parties), the delivered code can execute at the user platform, i.e. execution of the computer code by the processing system causes the processing system to perform the desired business functionality.

As per claim 2, Rigole does not explicitly disclose at least some of the components including one or more ports for receiving and/or outputting data to be manipulated. However, each machine in Rigole's collaboration architecture represent a physical computer, hence a necessary presence of port identification at the physical layer of the ISO network hierarchy would be recognized in order for network protocol to be achieved (see Fig. 1 – TCP/IP ports) and based on which "data channels" are defined (see col. 10 lines 1-5) to carry transaction information. The use of port identification to represent one such service provider is disclosed in Gangopadh (col. 16 lines 17-25). Based on Rigole's definition of data channels between interrelated participating parties and based on the physical foundation constituting a network hierarchy, it would have been obvious for one skill in the art at the time the invention was made

to implement the architecture of participating parties so that components related to service rendered by each parties (provider/consumer computers) is represented by a port (as in Gangopadh) with a listener for receiving asynchronously data into and out from the participating party's executing context (consumer or provider), because including a port for a specific component via a development GUI as in Gangopadh would enable a specific path for the user's application by which to expect data sent to and received from the provider, obviating otherwise extraneous packet filtering and port processing.

As per claim 3, Rigole does not explicitly disclose: each port having an agent adapted to control transfer of data to and from the component. Rigole discloses various format of data being communicated between the participating parties (col. 6 lines 47-59) with markup language protocol (HTML, XML, script) whereas a PDA client can be a thin client (col. 5 lines 41-53) and presents the IPCS capability as a *intelligent agent* to seek the best services for a request context(col. 3 lines 54-65). Following the scheme of using markup format from above, and the business application client-side development framework as in Gangopadh, Lipkin enhances the agent functionality in Rigole with a client communication within a framework architecture including a network of providers (Fig. 1) with use of dedicated agents to expedite or complement to the user's side capability with agent-specific functions (Lipkin: import agent, matching agent, delivery agent – Fig. 13, 15, 16). Based on Rigole's implementing of a service to capture XML forms (col. 5 bottom to col. 6 line 11) it would have been obvious for one skill in the art at the time the invention was made to implement the port identification as mentioned above (see claim 2) so that a listener associated thereto pertains to a agent or plurality thereof as in Lipkin, each with dedicated functionality to help process incoming data (parse XML data with matching its

content for resolution) and redirecting data to the appropriate receiver, all of which to expedite communication process underlying the business endeavor level of the user, whereby enhance or complement to the client platform lack of resources (e.g. a thin PDA machine) at the application level.

As per claim 4, Rigole disclose having the component:

Receive data including a number of data portions (Fig. 1, 3); manipulate the data sequence by

i) Adding data portions into the sequence at a predetermined location;

ii) Moving data portions from a first location to a second location within the sequence; iii) Removing data portions from the sequence; and, iv) Modifying data portions in the sequence (e.g. col. 5 lines 6-17; *data capture ... source ... another participating party's computer … presenting data to other computer* - col. 5 line 64 to col. 6 line 18; col. 5 line 64 to col. 6 line 18; col. 6 lines 49-51).

As per claim 5, Rigole discloses using a processing system including a store, the method including storing one or more of the data portions in the store (memory - Fig. 2; database 3.4 Fig. 3).

As per claim 6, Rigole discloses at least some of the components being formed from a number of combined sub-components, the sub-components also being components (data capture, presentation server - col. 5 line 64 to col. 6 line 21; administration module col. 7 line 3-18; Bill module – col. 11-12, monitoring module – col. 12-13, best services module – col. 13, search module - col.14, incentive module col. 14, Mining module, col. 14).

As per claim 7, Rigole discloses at least some of the components being formed using at least one of:

Manual manipulation of the data by an individual (col. 6 lines 2-9);

Computer code adapted to be executed by a processing system, to thereby manipulate of the data automatically (col. 6 lines 35-47); and,

Combinations of sub-components, the sub-components also being components (refer to claim 6; *external interface module ... database interface module ... to be used by other modules* – col. 7 lines 19-45).

As per claim 8, Rigole discloses the method being performed using one or more processing systems (Fig. 1).

As per claim 9, Rigole disclose causing a first processing system to:

Select a number of components in response to input commands received from a user (refer to claim 7: manual manipulation; col. 9 line 14-25 – Note: consumer forms reads on user selecting of components provided in a XML form triggering service of mapping as per *Best Services Selection module* – see col. 13);

Define the component combination using the selected components (refer to claim 1; col. 7 line 65 to col. 8 line 9); and

Cause the component combination to be implemented such that the defined series of data manipulations is performed (refer to claim 1; col. 9 line 14-25).

As per claim 10, Rigole does not explicitly disclose at least some of the components including one or more *ports*, the method including causing the processing system to: a) Provide an indication of the ports of each selected component to the user; and, b) Interconnect selected

ones of the ports in response to input commands from the user to thereby define the component combination. But the implementation of interconnected diagram/modules via message arc linking service nodes with user's specification of port has been disclosed in Gangopadh, as set forth in claim 1; hence the implementation of components via user interface as in Rigole to provide ports for each components being selected, and to select ports via such user input would have been obvious in view of the rationale set forth in claim 2.

As per claims 11-12, Rigole discloses a second processing system to: Determine details of a number of components (col. 16 line 61 to col. 17 line 24); Provide at least an indication of the details to the user via the first processing system (Best Services Selection Module, col. 13; Comparison/Selection module col. 11; Services Search Module – col. 14);

causing the processing system to: Select respective ones of the components in response to input commands from the user (refer to claim 10); and, Provide the details of the selected components to the user via the first processing system (refer to claim 10).

As per claim 13, Rigole discloses second processing system to include: a) A store for storing the component specifications including at least one of:

An indication of the manipulation service (presentation server – col. 6 lines 12-21);

A graphical representation of the component (bitmap, graphics standard, WAV, JPEG, GIF - col. 6 lines 48-56); and,

and, b) A processor (Fig. 1), the method including causing the processor to: i) Obtain one or more component specifications from the store (Fig. 3; Selection Module – col. 11); and, ii) Provide the component specifications to the user via the first processing system (refer to claim 1; col. 16 line 61 to col. 17 line 20; Selection module - col. 11).

As per claim 14, Rigole does not explicitly disclose causing the first processing system to: a) Generate a graphical representation of the one or more selected components; and, b) Manipulate the graphical representation in response to input commands received from a user to thereby define the component combination.

But the endeavor to generate software component to be executed at the client machine has been addressed in claim 1, where in light of Lipkin delivering of software from vendors, including developing methodologies using CASE tools and activity state diagrams, with similar teaching in Gangopadh's collaboration among applications, including a UI enabling the end user (first processing system) to create tree of service nodes for representing the asynchronous communication between collaborating applications, with inter-node messages/arcs implemented as requests among the collaborating services, the event-based exchange and associated messaging code defined via servicing ports, the representation in terms of a graphical model view being subjected to user's manipulation (see Gangopadh: Fig. 3-5, 6, 10-18). The rationale of obviousness is referred back to the rejection in claims 1, 2, 10.

As per claim 15, Rigole discloses the first processing system being coupled to one or more component processing systems via a communications network (Fig. 1), each component processing system being adapted to implement one or more respective components (refer to claim 1), the method including:

Generating a service request for each component in the component combination (col. 2 lines 58-64 – Note: user defining a *service sectors* reads on request for each component performed per defined service - see col. 4 line 44 to col. 5 line 4; see: service Selection – col. 11;

Bill module – col. 11-12, monitoring module – col. 12-13, best services module – col. 13, search module , col. 14, incentive module col. 14, Mining module, col. 14); and,

Transferring the service request to each entity via the communications network, each entity being adapted to respond to the service request to implement the data manipulation embodied by the respective component (*logical chain* - col. 6 line 60 to col. 7 line 2; col. 5 lines 6-17; *data capture ... source ... another participating party's computer … presenting data to other computer* - col. 5 line 64 to col. 6 line 18).

As per claim 16, Rigole discloses: Determining any data required by the components; and, Providing the data in the service request (Fig 3; *Consumer ... data input ... parsed* – col. 9 lines 5-24).

As per claim 17, Gangopadh disclose each service request including an indication of the interconnections for each of the ports of the respective component (refer to claim 1) and the rationale for obviousness is referred back to claims 1-2.

As per claim 18, Rigole discloses causing each component processing system to: a) Implement one or more respective component instances in accordance with the received service request; and, b) Cause each component instance to: i) Interact with other components in accordance with the interconnections defined n the service request; and, ii) Perform any required data manipulations; all of which being addressed in claim 1; e.g. using the participating parties and modules stored therein (Fig. 2), modules instantiated per the data capture server (col. 9 lines 5-24) based on the matching (Figure 3) leading to interaction among services (col. 6 line 60 to col. 7 line 2; col. 10 line 39-53)

As per claim 19, Rigole does not explicitly disclose causing each component processing system to: a) Implement a respective agent associated with each port; and, b) Cause each agent to cooperate with an agent of another component in accordance with the defined interconnections, to thereby allow data to be transferred between the ports.

The rationale as to use ports to define a respective service component subjected for a service rendering has been addressed in claim 10; whereas associating an agent for each component transaction via defined interconnected services or port identification thereof (based on a UI graphical representation and code generation) has been addressed in claims 2-3. Based on the transfer of data among participating parties in Rigole, it would have been obvious for one skill in the art at the time the invention was made to implement data transfer so that ports is used on conjunction with the respective agent as set forth in the above claims in order to associate port specialization with supportive agents to obtain client platform improved performance and/or communication benefits set forth in claim 3.

As per claim 25, Lipkin discloses transactional type of applications requiring creating/implementing bean underlying a runtime context (col. 22 lines 53-61) with a bean context (col. 23 lines 35-40) in terms of EJB model context embedded in metadata (col. 24 lines 49-60), while the rationale as to causing the Rigole's STN/IPCS system to generate code destined for user runtime within the business application for the consumer to interpret script to execute the desired functionality has been addressed as obvious in claim 1. Based on Lipkin's bean context inside XML, script or metadata provided to users, it would have been obvious for one skill in the art at the time the invention was made to Rigole business transaction and user's runtime receiving script or web format so that code to execute the business functionality would

be dependent on context for the same reason as set forth in claim 1 as to why providing generated code would be useful to the consumer's interpretation of the provided responses from the STN/IPCS services.

As per claim 26, Rigole discloses code necessarily in various languages to support the Web pages and script execution/creation at the consumer's runtime (col. 7 lines 50-64; *contextually indicated* – col. 4 lines 37-44) where the runtime is based on context of the request thence the result of data manipulation from participating parties (refer to claim 1; col. 4 lines 35-44) hence has disclosed b) Perform the data manipulation service in accordance with the determined context such that the performed data manipulation is dependent on the context; but does not explicitly disclose *a) Determine a context for the code*; and,

However, the provision of manipulation service data response and associated bean for script execution according to a context dependency has been addressed as obvious in claim 25, and the rejection of the above limitation a) would incorporate the obviousness rationale therefrom.

As per claim 27, Rigole discloses processing system (Fig. 1) including at least a memory, stack and registers for executing the users' application which inherently necessitates a runtime context including at least one of: a) The state of at least one of the registers, stack and memory (col. 5 lines 30-41); the context including b) Other components in the defined component combination (refer to defined combination of claim 1).

As per claim 29, Rigole discloses a apparatus for generating computer code using components, each component embodying a respective data manipulation service, the apparatus including one or more processing systems adapted to:

a) Determine a component combination, the component combination defining a series of data manipulations(refer to claim 1) and being defined in accordance with the requirements to allow a desired functionality to be achieved(refer to claim 1); and,

b) Implement the component combination by:

i) Causing the implementation of a component server corresponding to each component in the combination(refer to claim 1), each component server being implemented by a processing system; and,

ii) Causing each component server to perform the respective data manipulation service in accordance with the defined series of data manipulations (refer to claim 1), at least some of the component servers performing the respective service by interacting with a data sequence (refer to claim 1), and

at least some of the component servers performing service by at least one of: interacting with one or more component servers(refer to claim 1); and, causing the implementation of further components(refer to claim 1);

Obtaining as a result of the performing the series of data manipulations and from the data sequence, a resultant data sequence, the resultant data sequence being the computer code (refer to claim 1)

Rigole does not explicitly disclose implementing the component combination and data manipulation to *generate the computer code* by implementing component servers and causing the servers to perform a service; nor does Rigole explicitly disclose *obtaining*, as result from data manipulations data sequence, *a resultant data sequence being the computer code and providing*

the computer code to a processing system, such that execution of the computer code by the processing system causes the processing system to perform the desired functionality.

However, these limitations have been rendered obvious as set forth in claim 1.

As per claim 30, Rigole discloses:

a) One or more component processing systems, each component processing system being adapted to implement a respective component (refer to claim 9; *executed as a separate logical server ... physical device* - col. 6 line 60 to col. 7 line 2; col. 10 line 39-53); and,

b) A first processing system, the first processing system (consumer systems 3 - Fig. 1) being adapted to: i) Define the component combination in accordance with input commands received from a user; ii) Determine the component processing systems implementing the respective components; and iii) Transfer service requests to each of the determined component processing systems (refer to claim 8, claim 1).

As per claim 31, Rigole discloses component processing system being adapted to: a) Receive the service request; b) Generate a respective component instance; and, c) Perform the service using the respective component instance (refer to claim 15).

As per claims 32-33, Rigole discloses a second processing system, the second processing system being adapted to store details of available components(refer claims 11, 13); the second processing system being adapted to obtain the details of a component from a respective component processing system (refer to claims 12, 13, claim 18).

As per claim 34, Rigole discloses first processing system being adapted to cooperate with the second processing system (Fig. 1) to thereby allow a user to: Select one or more of the

available components (refer to claim 12); and Define the component combination (refer to claim 1).

As per claim 46, Rigole discloses a method of providing a dynamic component for providing data manipulation services, the method including:

a) Determining a service to be performed (refer to claim 1);

b) Determining at least two components of performing the service (refer to claim 63), wherein the components of performing the service utilizing respective components include:

i) Selecting components (refer to claim 1; Selection module: *consumer ... select ... attributes ... define a best program* - col. 11;) to implement the desired services;

c) Determining a process (refer to USC 112 Rej.) of selecting one of the programs in accordance with received data (see above; Services selection module - col. 13); and,

d) Generating a component specification defining a component embodying the data manipulation service (col. 11 lines 20-55; Fig. 3; col. 15; col. 16 line 61 to col. 17 line 24).

Rigole does not explicitly disclose: *Defining a component schematic including at least: A first schematic portion representing any common portion of each method of performing the service; At least two second schematic portions representing any different portion of each method of performing the services*; nor does Rigole explicitly disclose *selector agent for selecting a respective one of the second schematic portions*.

The implication for code to be developed or provided as necessary embedded executables (Java API, applet, Javascript) to support the use of the transmitted format via 'data channels' in terms of page interpretation or dynamic script creation in Rigole consumers side (see Rigole: col. 8 lines 64 to col. 9 line 4) after receiving such response format from the

participating parties (server response) has been addressed in claim 1. And developing of code has been taught in Lipkin BDK tool server to enable metadata (Lipkin: Fig. 15-16) to derive widget-model (*view 892*, Fig. 8B; Fig. 8C) graphically in order to assemble bean code as to help the network of users to develop their desired business management application using the underlying code embedded in the transmitted XML forms (see col. 28 line 40 to col. 29 line 59), whereas development of code in form of graphical model (a top level reaching out to lower levels – top common component branching to at least two lower components). Following Lipkin, the use of interconnected diagram representation (or *activity diagrams*) as a in a schematic form is disclosed by Gangopadh (see Fig. 2-18) to implement collaboration among components of the viewed model where methods invocation interacting with other components (Gangopadh: col. 12 line 20 to col. 14 line 15; col. 4 line 63 to col. 5 ine 24) on the interconnected diagram representation (top common nodes branching to two children nodes) are selected and implemented by the developers. Based on the use of code to support a transmitted form of stream whereby to request/specify service invocation or to obtain data from collaborating services (participating parties in Rigole based on consumers' selection), it would have been obvious for one of ordinary skill in the art to implement the service providers in Rigole based on Lipkin's teaching metadata-derived model view, so that Java-APIs type of code (in Rigole or Lipkin) generated based on such model includes schematic representation (i.e. *any common portion of method service and at least two second schematic portions representing any different portion of each method of performing the service)* being generated for one to choose a form of invocation requiring data between entities on the schematic representation as taught in Gangopadh, whereby at least one or two methods or function calls to obtain respective data of

the graph nodes are implemented as code to support the execution of page/scripts being instrumental in the consumer's runtime in Rigole and in Lipkin. That is, the motivation as to implement code with API method calls (at least two to create a request/receipt of data) as set forth above would include the same benefits as presented in the rational of claim 1.

Nor does Rigole explicitly disclose selecting programs as *selecting methods*; nor does Rigole disclose selecting one or two *components as selecting one or two methods*. But the choosing of methods for Java or Bean/applet API falls under the ambit of generating code using a viewable interconnect representation (schematic component) being used by developers to specify code calling between node/blocks of the schematic representation as set forth above using Lipkin, and Gangopadh; hence the rationale for rendering the above obvious would be same as above.

As per claim 47, Rigole does not explicitly disclose defining an agent associated with each input or output, the agent being adapted to cooperate with an agent of another component in accordance with the defined interconnections, to thereby allow data to be transferred between the ports of the components. But the expediting process by which agents are allocated per ports to process in and out data from Rigole communication paradigm has been addressed in claims 2-3.

As per claim 48, Rigole (in view of Lipkin, Gangopadh) disclose an apparatus for providing a dynamic component for providing data manipulation services, the apparatus including a processing system for: a) Determining a service to be performed; b) Determining at least two methods of performing the service, wherein the methods of performing the service utilising respective components include: i) Selecting components to implement the desired services; ii) Defining a component schematic including at least: (1) A first schematic portion

representing any common portion of each method of performing the service; (2) At least two second schematic portions representing any different portion of each method of performing the services; and, (3) A selector agent for selecting a respective one of the second schematic portions; c) Determining a method of selecting one of the methods in accordance with received data; and, d) Generating a component specification defining a component embodying the data manipulation service (refer to claim 46)

As per claim 51, this claim recites the same subject matter of claim 1; hence would incorporate the rejection as set forth therein.

As per claim 52, Rigole (in view of Lipkin, Gangopadh) discloses: Allowing users to select components; and, b) Providing users with a component specification for each selected component, each component specification defining the data manipulation service (refer to claim 9) and port specifications defining data to be received at or output from respective ports (refer to claim 10).

As per claim 53, Rigole discloses obtaining the component specification for a respective component from an entity implementing the component (refer to claim 1; col. 16 line 61 to col. 17 line 20; Selection module - col. 11).

As per claim 54, Rigole discloses one or more processing systems coupled to a user end station via a communications network, the method including: a) Allowing the user to select the components using the end station; and, b) Transferring the component specifications to the end station from one or more of the processing systems (refer to claim 1, 8-9, 15).

As per claim 56, Rigole discloses: a) Causing the end station to generate service requests in accordance with the component combination; and, b) Transferring the service request

to entity processing systems thereby causing the entity processing systems to perform the data manipulation defined by the component (refer to claims 1, 8-9, 15, 17).

As per claim 57, the limitation as to *the component combination defining connections between the components, the service requests including connection information determined by the end station from the component specifications* falls under the ambit of *port* specifications and interconnections of component combination associating with the services to be performed by one or more entities; and this has been addressed in claims 2-3, 10.

As per claim 58, Rigole discloses a) Generate one or more component instances in accordance with the received service request; b) Cause each component instance to: i) Cooperate with other components to send and/or receive data; and, ii) Perform the required data manipulation service (refer to claims 4, 6-7, 15, 18)

As per claim 59, Rigole (in combination with Lipkin, Gangopadh) discloses apparatus for generating code, the apparatus including a system for:

a) Providing details of a number of components (see claim 12; col. 11 lines 6-55), each component representing a respective data manipulation service implemented by a respective entity;

b) Allowing users to define a component combination defining a series of data manipulation services; and,

c) Implement the component combination to generate the computer code by:

i) Causing the implementation of a component server corresponding to each component in the combination, each component server being implemented by a processing system; and,

ii) Causing each component server to perform the respective data manipulation service in accordance with the defined series of data manipulations, at least some of the component servers performing the respective service by interacting with a data sequence, and at least some of the component servers performing service by at least one of:

1) interacting with one or more component servers; and,

(2) causing the implementation of further components;

iii) Obtaining as a result of performing the series of data manipulations and from the data sequence, a resultant data sequence, the resultant data sequence being the computer code; and,

d) Providing the computer code to a processing system, such that execution of the computer code by the processing system causes the processing system to perform the desired functionality;

All of which having been addressed in claim 1.

As per claim 62, Rigole discloses implementing at least some component servers (refer to claim 29) by: a) Determining a context from the defined component combination; and, b) Performing the data manipulation service in accordance with the determined context(context – col. 4 lines 33-44)

As per claim 63, Rigole discloses wherein at least some of the components include a number of predetermined techniques for performing the respective data manipulation service (service Selection – col. 11; Bill module – col. 11-12, monitoring module – col. 12-13, best services module – col. 13, search module -col.14, incentive module col. 14, Mining module, col.

14 – Note: specialized modules per participating service reads on predetermined techniques to perform data manipulation), and

wherein the method includes implementing at least some of the component servers by:

Selecting one of the predetermined techniques based on the component combination (refer to claim 1, 29; service Selection – col. 11); and,

Performing the respective data manipulation service using with the selected predetermined technique (col. 5 lines 6-17; *data capture ... source ... another participating party's computer … presenting data to other computer* - col. 5 line 64 to col. 6 line 18 - Note: transferring of streams of data among servers based on the state of the data received and the next function performed by the next servers reads on implementing servers for handling data manipulation using techniques selected via interaction among servers)

As per claims 64-65, refer to claims 62-63.

11. Claims 20-24, 37-43, 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rigole, USPN: 7,139,728 (herein Rigole) in view of Lipkin, USPN: 6,721,747 and Gangopadhyay et al, USPN: 6,973,638; further in view of Hanagan et al, USPubN: 2001/0056362 (herein Hanagan)

As per claims 20-21, Rigole does not explicitly disclose causing the second processing system to: a) Determine performance information, the performance information being representative of one or more criteria regarding the implementation of the components; b) Provide the performance information to a user, the user selecting the components in accordance with the performance information; the performance information including at least one of: a) An indication of the entity implementing the component; b) An indication of the geographical

location of the entity; c) An indication of the duration for implementing the component; d) An indication of a cost associated with implementing the respective component; and, e) A rating, the rating being indicative of the success of the component.

Rigole discloses a provider service to electronically notify the user/consumer with information regarding billing, price, rating (electronic copies, notifies by email, web pages– col. 12 lines 3-42; col. 10, lines 39-45; *price, rating, particular region* – col. 11 lines 38-51) or present web pages to the accessing client in order for client/user to review details or payment options about the billing before payment; hence the or performance information/attributes for user to select/weigh is disclosed or would have been obvious. Regarding the latter, the same business practice by which a provider provides information about tariff or pricing regarding the service or option presented to the user is disclosed in Hanagan (see para 0196, pg. 12) where a customer care service prepare information for a price plan (para 0185, pg. 11) with disclosing of charges (para 0188, pg. 11), bill information, information associated with *transmission speed* as well as template presenting type of services are also provided to the client (para 0189-0190 pg. 11), i.e. performance indication. Based on Rigole's purpose to reach effective shopping cRigolebility and extensibility to various group of consumers (see Rigole: col. 1-2) it would have been obvious for one skill in the art at the time the invention was made to implement IPCS module by Rigole in terms of conveying billing or offering/rating information as set forth above so that performance indication regarding cost of services and speed of transmission be made available to the prospect client for all necessary charges and options be considered, thereby compacting the effectiveness of the transaction in view of obtaining satisfaction or expediting a reach towards user agreement based on the amount of information delivered prior to actually

providing the service, as endeavored in Rigole and Hanagan; e.g. providing a rating as well as price or speed type performance for the user to weigh in order attract a wider population of customer leading to a larger geographical groups.

As per claim 22, Rigole does not explicitly disclose:

providing a number of different components for performing equivalent services, the different components being provided by different entities; and, inducing competition between the entities to thereby drive improvement of the components.

The concept of allowing user to shop or choose among service sectors entails a inducing a form of action reaching improvement of quality by each sectors when rating, sale terms information is divulged to the consumers as well as pricing and available services information (see col. 11 lines 20-55). Since Rigole's network provides various services offered over many sectors, which can be selected by consumers pertaining within extended geographic locations, a setting for competition among sectors or vendors is suggested. Hanagan discloses competition in prices for a same product that has to consider customer's choice (para 0009, pg. 1; para 0045, pg. 2) and that customer care, billing robust performance are essential for competing in a market (para 0084, pg. 4). It would have been obvious for one skill in the art at the time the invention was made to implement the competition-oriented distribution of sectors (*the better the competition* - col. 4 line 50 to col. 5 line 4) and the provision of billing, rating, available sectors information to the prospected buyers/consumer as in Rigole, based on the teachings by Hanagan so that the information is underlying a purport to promote competition among equivalent services or product vendors in terms of price, rating, billing conditions, terms of offerings and performance (see Hanagan) as set forth above, because competition is fundamental in today's

market for it is underlines the ultimate goal to as fulfilling satisfaction of the consumer (see Rigole: the more convenient the STN will be for the consumers - col. 4 lines 52-57)

As per claims 23-24, Rigole discloses generating revenue by charging a cost (price – col. 3 lines 37-46) for the use of each component; but does not explicitly disclose

a) Providing at least some of the revenue to a respective entity implementing the component; and, b) Having the operator of the second processing system retain at least some of the revenue.

But since this is a mere human choice (see USC 112 Rejection), it would have been obvious for one skill in the art at the time the invention was made to implement Rigole generating of revenue so that revenue can be selectively distributed among service renderers or operators of each server processing system (e.g. service can retain partial or whole revenue), because, as this is a well-known concept, revenue should be a reward only based on performance and contributing factor for each service as distributed in Rigole's IPCS network.

As per claims 37-38, Rigole discloses a method of allowing users to manipulate data, the method including using one or more processing systems coupled to a number of end stations via a communications network, using the one or more processing systems to:

Store details (see claims 11-12) of a number of components, each component representing a respective data manipulation service implemented by a respective entity (refer to claim 1) and the details being at least partly based on a component specification from a respective entity (refer to claim 1) and the details being at least partly based on a component specification from the respective entity (refer to claim 9); and,

Provide details of selected components to users, thereby allowing the users to select components (see claim 12; col. 11 lines 6-55) and define a component combination defining a series of data manipulation services for manipulating the data sequence using an end station (refer to claim 1, claim 9);

Rigole does not explicitly disclose: *determine performance information representative of one or more criteria regarding the implementation of the components; and, provide the performance information to a user, the user selecting the components in accordance with the performance information;*

the performance information including at least one of: a) An indication of the entity implementing the component; b) An indication of the geographical location of the entity; c) An indication of the duration for implementing the component; d) An indication of a cost associated with implementing the respective component; and, e) A rating, the rating being indicative of the success of the component.

But the information provided to users serving a weigh or criteria towards quality, offerings, cost and performance to enable review and consideration by the customers prior to deciding on a service or a product purchase has been taught in Rigole (see claim 20), whereas the performance information (cost, rating, duration, location) in regard to support the customer's endeavor to go about the purchase has been deemed disclosed (by Rigole) OR obvious as set forth in claim 20-21 from above (in view of Rigole/Hanagan).

As per claim 39, refer to claim 22.

As per claims 40-41, refer to claims 23-24

As per claim 42, Rigole discloses processing system with processor (Fig. 1) as: a) Storing component specifications in the store; and, b) Providing the component specifications to the user via the end station, thereby allowing the user to define a component combination and implement the required data manipulation services (refer to claims 11-12).

As per claim 43, Rigole discloses apparatus for allowing users to manipulate data, the apparatus including one or more processing systems coupled to a number of end stations via a communications network, the one or more processing stations adapted to:

a) Store details of a number of components, each component representing a respective data manipulation service implemented by a respective entity and the details being at least partly based on a component specification from the respective entity;

b) Provide details of selected components to users, thereby allowing the users to select components and define a component combination defining a series of data manipulation services for manipulating the data sequence using an end station;

c) Determine performance information representative of one or more criteria regarding the implementation of the components; (all of which being addressed in claim 37)

and,

d) Provide the performance information to a user, the user selecting the components in accordance with the performance information (refer to rationale in claim 20).

As per claim 55, refer to the rationale set forth for claim 21.

12. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rigole, USPN: 7,139,728 (herein Rigole) in view of Lipkin, USPN: 6, 721, 747 (herein Lipkin) and further in

view of Gangopadhyay et al, USPN: 6,973,638; further in view of Lapstun et al, USPN: 7,154,638 (herein Lapstun)

As per claim 28, Rigole does not explicitly disclose including making the data manipulation context dependent by at least one of: a) Dithering; b) Meshing; and, c) Obscuring. However, Rigole discloses printing in a context of presentation server transmitting format for viewing (col. 6 lines 12-21, 47-55) and printing by a user (col. 10 lines 20-32) at the end of the transmission channels supporting the services within the STN system. The embedding of specifications inside W3c markup language as in Rigole or Lipkin has been well known for presenting data or for enabling rendering within a page. Lapstun discloses server responding to request form (Fig. 1) using tag encoding methodology (W3C) where netpages include formatted elements as hyperlink or video/graphic object (Fig. 27-30) with form element for rendering (Fig. 32, Fig. 38a) in conjunction a controller operating with printed page encoder (Fig. 44-46, 47-52), the encoding used in conjunction with a print engine adjusted to tone/ink (i.e. lightening or obscuring) parameters and print head including dithering during the layout of pipeline of streams (col. 49 lines 5-26). It would have been obvious for one skill in the art at the time the invention was made to implement the markup format transmission via data channels by Rigole system so that the service context for data manipulation would include presentation context regarding printable format as set forth above, including server side tag encoding with consideration for obscuring and dithering as taught in Lapstun, because markup tag embedding via standardized, platform independent format/language, as shown in Lapstun or in Rigole/Lipkin, was well-known at the time the invention was made, and would support stream communication between servers and consumers, such that web pages rendering destined for the consumers receiving

manipulation data response from the STN/IPCS, can provide proper encoding for printing purposes as contemplated in Rigole.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A Vu whose telephone number is (571) 272-3735. The examiner can normally be reached on 8AM-4:30PM/Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis Bullock can be reached on (571)272-3759.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3735 (for non-official correspondence - please consult Examiner before using) or 571-273-8300 (for official correspondence) or redirected to customer service at 571-272-3609.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Tuan A Vu/

Primary Examiner, Art Unit 2193

May 19, 2010